STATE OF MARYLAND

# DHMH

**Maryland Department of Health and Mental Hygiene**
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## October 15, 2010

# Public Health & Emergency Preparedness Bulletin: # 2010:40
# Reporting for the week ending 10/09/10 (MMWR Week #40)

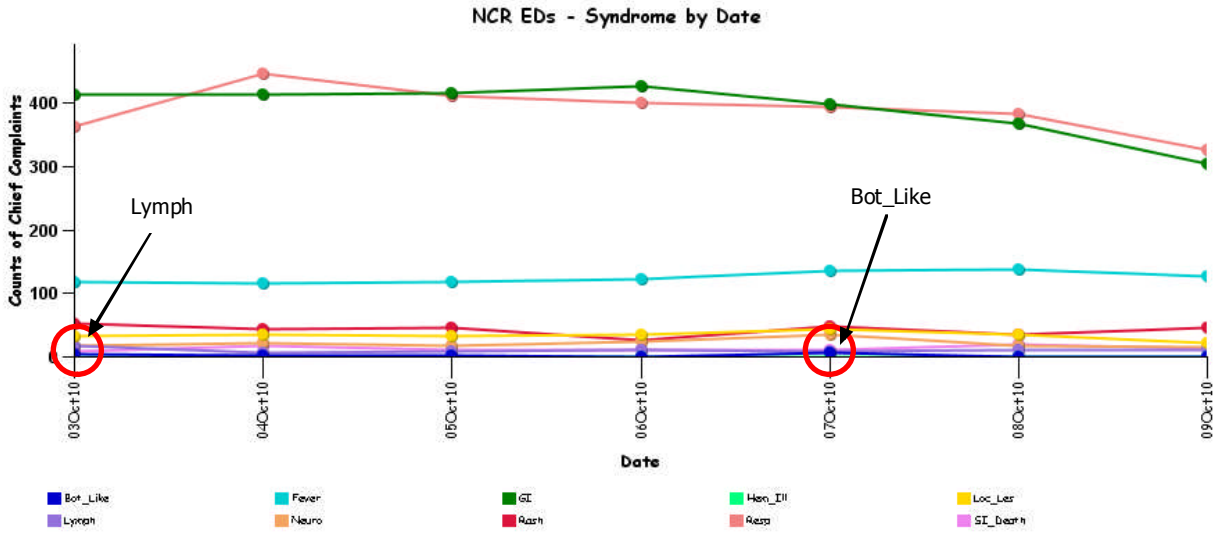
**CURRENT HOMELAND SECURITY THREAT LEVELS**

**National:** **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
**Maryland:** **Yellow (ELEVATED)**

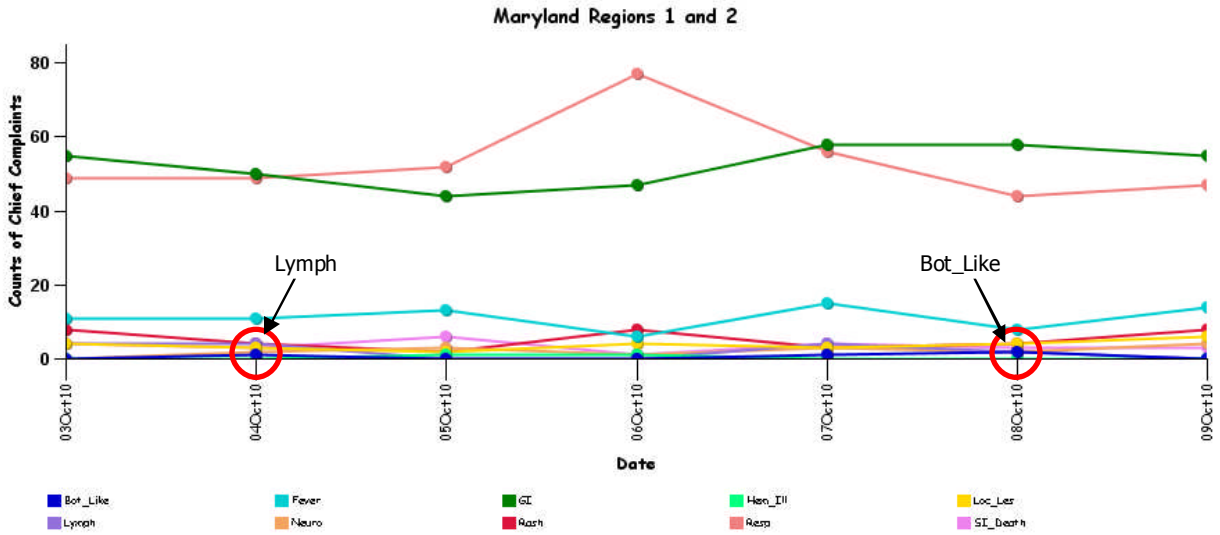
**SYNDROMIC SURVEILLANCE REPORTS**
**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

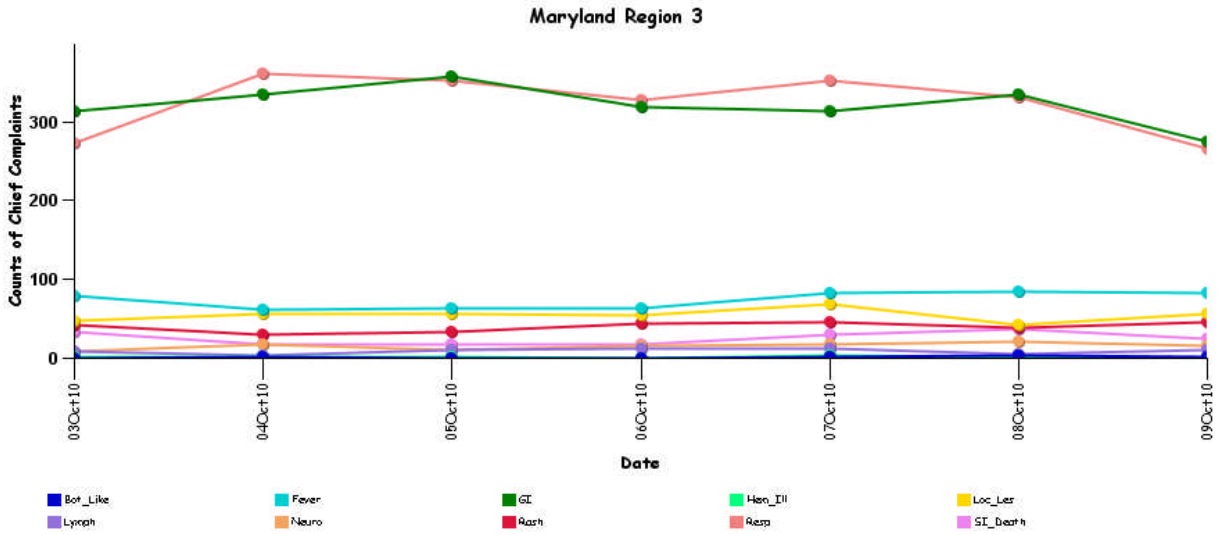
**MARYLAND ESSENCE:**



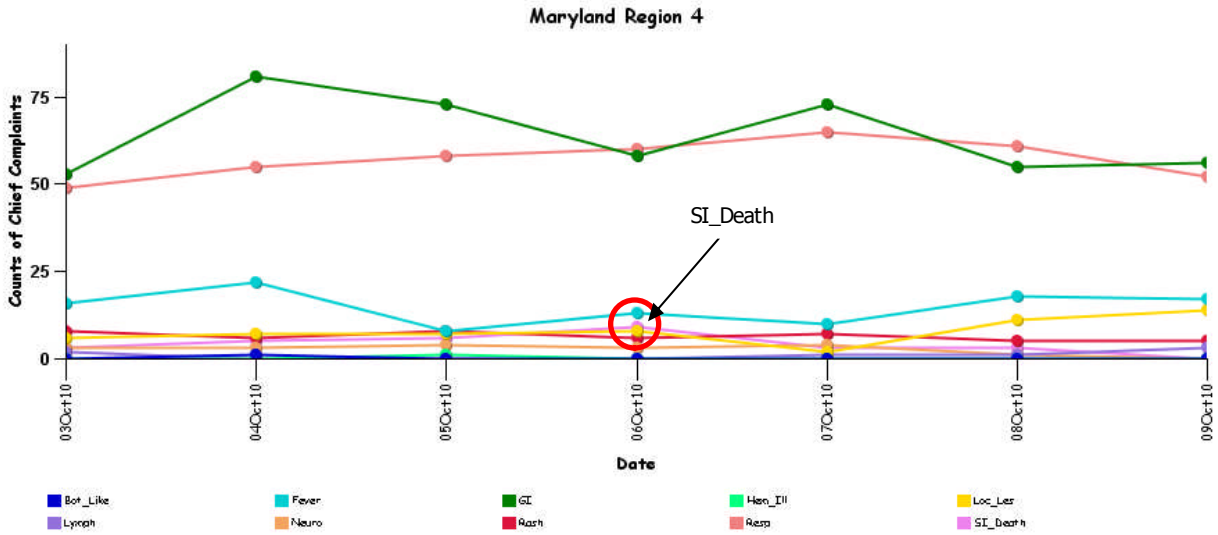

*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE



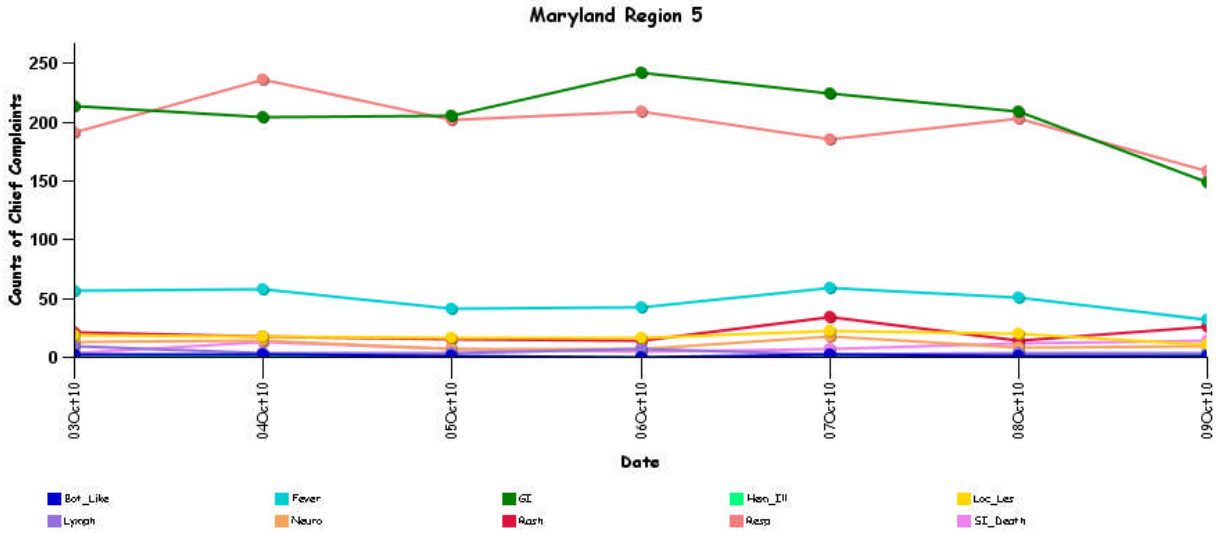

* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE




* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



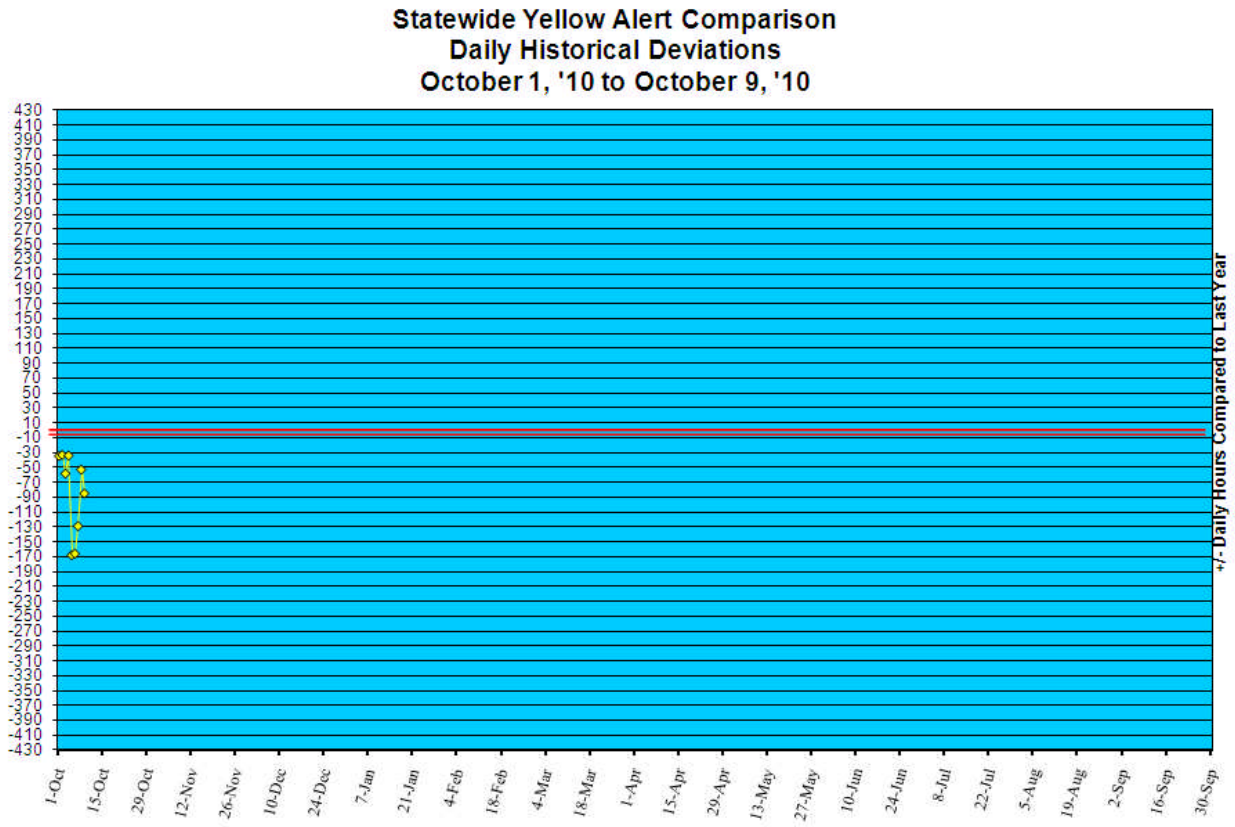

* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE




* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

**REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/09.




**REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

**MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2010 did not identify any cases of possible public health threats.

**REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

**COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

| **Meningitis:** | **Aseptic** | **Meningococcal** |
|---|---|---|
| New cases (October 03– October 09, 2010): | 21 | 0 |
| Prior cases (September 26 – October 02, 2010): | 14 | 0 |
| Week#40, 2009 (October 04 – October 10, 2009): | 11 | 0 |

**3 outbreaks were reported to DHMH during MMWR Week 40 (October 03 – October 09, 2010)**

**1 Gastroenteritis outbreak**
1 outbreak of GASTROENTERITIS in a Correctional Facilities

**1 Foodborne gastroenteritis outbreak**
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Workplace

**1 Rash illness outbreak**
1 outbreak of SCABIES in a Nursing Home

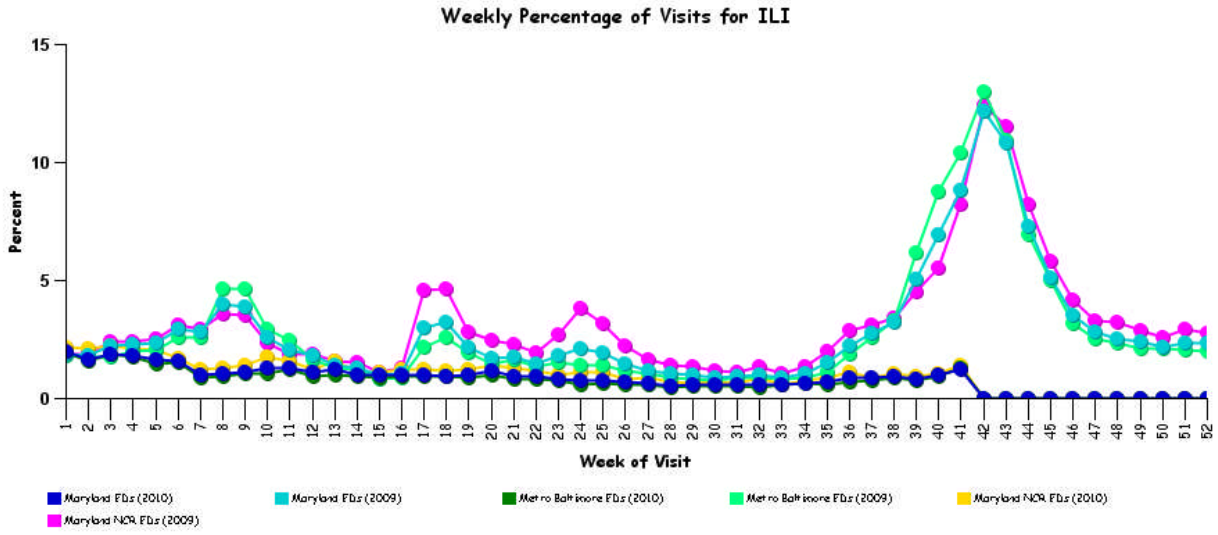
## MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was sporadic for Week 40.

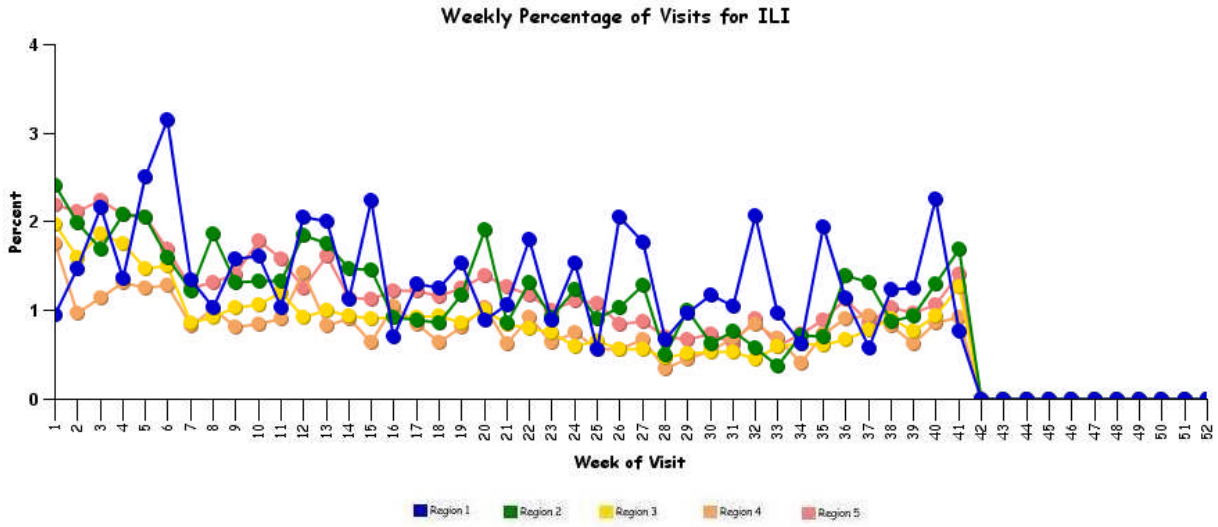
## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



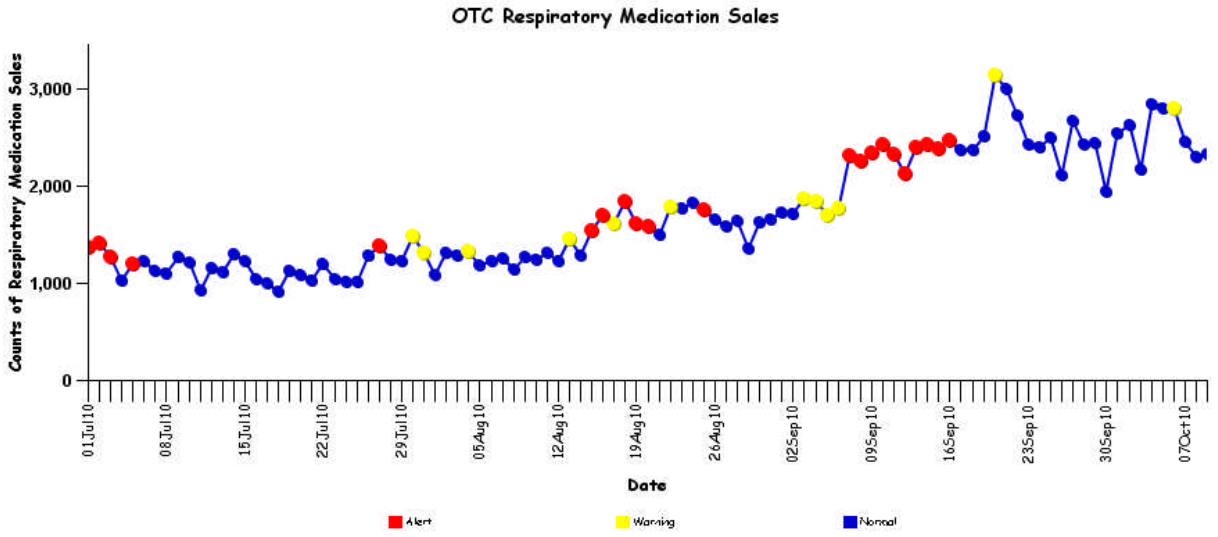

* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total




*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

**OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:**

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



**PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS:**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of August 31, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 505, of which 300 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

**NATIONAL DISEASE REPORTS:**

**PLAGUE (OREGON):** 04 October 2010, State health officials say a woman in Lake County has been diagnosed with bubonic plague. It is the 1st diagnosis of plague in Oregon in 15 years. The disease terrorized Europe's population more than 600 years ago, but the plague is treatable when caught early. Dr. Emilio DeBess is the public health veterinarian and an epidemiologist with the Oregon Department of Human Services. He says the disease, once known as the Black Death, got somewhat of a bad rap after killing off 1/3rd of Europe's population in the 1300s. But he says that thanks to scientific advances, "it's a very treatable condition with antibiotics, and so that's usually not a concern; back then, they didn't have antibiotics. We do have very good antibiotics that treat the infection." Health officials have not released the name of the Lake County woman who fell ill at the end of August 2010. DeBess says authorities are now trying to determine the source of the infection. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**SALMONELLOSIS (IOWA, NEBRASKA, OKLAHOMA):** 03 October 2010, The Oklahoma salmonellosis outbreak has risen to 15 identified cases in 3 counties. The state Health Department's investigation also determined the outbreak may extend into 2 other states. The department is monitoring the outbreak of a similar strain of Salmonella identified in Iowa and Nebraska, said Laurence Burnsed, the Oklahoma Health Department's communicable disease division director. Those states are reporting just a couple of cases, so far. An additional 2 cases were identified Fri 1 Oct 2010, among elementary-age children in the Mustang School District in Canadian County, for a total of 12 cases there. Also previously confirmed were 2 adult cases in Oklahoma County, including one person hospitalized. Carter County also has a young adult with a confirmed case of salmonellosis. So far, they have not been able to identify sources or possible sources of the bacterial disease. It appears that not all the Oklahoma cases are tied to the school system. The source could be food that is widely distributed to several areas of the state, he said, but there's not enough information yet to suggest a food that people should avoid. Health Department staffers spent Fri 1 Oct 2010 interviewing ill adults, parents of ill children, as well as 45 area people who are well. Comparing activities and foods eaten by both groups helps the department to piece together a pattern of the illness. But staffers need to interview more people and evaluate more data. Burnsed said it's difficult to say how long that will take. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**INTERNATIONAL DISEASE REPORTS:**

**LASSA FEVER (SIERRA LEONE):** 08 October 2010, Health officials in Sierra Leone on Thursday said 45 people had died from Lassa fever in the 1st 9 months of the year including a woman who ran a rat meat restaurant. The head of the health ministry's national disease surveillance unit, Foday Dafae, said that up to 152 cases of Lassa fever, which can be transmitted by bush rats, had so far been confirmed for the same period. Dafae said tests showed 21 people had come into contact with the woman and her 6-year-old son, who also died, in the northern city of Makeni. All others survived after emergency treatment. According to the official, the disease which has migrated from the forest region of the east to the savannah grasslands of the north, causes fever, sore throat, chest pain, diarrhoea and loss of hearing. Medical experts here said the disease was 1st discovered in the northern Nigerian village of Lassa in 1969 and it was now endemic in parts of West Africa including Liberia, Guinea, Senegal and rural Sierra Leone. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN):** 08 October 2010, Another 5 patients suspected of having contracted Crimean-Congo hemorrhagic fever (CCHF) were brought to Holy Family Hospital (HFH) in Rawalpindi on Thursday evening. The suspected patients include 2 women and 3 men. Talking to the Express Tribune, Abdul Waheed, a staff member of the hospital's isolation ward said these patients' blood samples will be sent to the National Institute of Health (NIH) to be tested for CCHF virus on Friday. He said 27 out of the 32 patients admitted to the ward had tested positive for the virus. He said that blood samples of the 3 female staff members of the hospital who had earlier tested positive for CCHF, and were treated, have been sent to the NIH again for verification. Their results are due on Friday, he added. Dr Saima Naz, also a senior staff member of the hospital's isolation ward said that 5 patients in the ward have tested positive of dengue fever, while blood samples of the remaining 21 patients suspected of dengue have been sent to NIH. The majority of these patients belong to Chakwal and include 2 children, said Naz. She said strict measures were being taken in all hospital wards to prevent the disease from spreading. (Viral Hemorrhagic Fever is listed in

Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**ANTHRAX, HUMAN, BOVINE (BANGLADESH):** 08 October 2010, The 1st case of human anthrax has been detected in Kurigram [Rangpur division] on the same day that the government withdrew a red alert supposedly reassured that its spread had been contained. SB, 25, wife of SI of Dhananjoy village under Omar Majid Union of Rajarhat Upazila [subdistrict], was diagnosed to have contracted anthrax on Thursday. The district civil surgeon, Dr Golam Mostafa, formed a 3-member medical board to detect and treat more anthrax patients, if there were any. The medical board also gave necessary treatment to SB. Dr Mostafa told reporters it was the 1st case of anthrax in the district and, "The district health officials were kept on highest alert. There is nothing to panic. We have sufficient vaccines in stock." SB, who is also pregnant, visited the Omar Majid Union Health Centre on Monday to treat infections on her legs. The duty doctor Belal Hossain sent her to Rajarhat Upazila Health Complex suspecting her to be infected with anthrax. Subsequently she was sent to Kurigram Sadar Hospital for further treatment. Medical board member Dr Ajoy said that the patient was out of danger. SB said that 10 days ago symptoms of infection were found on her legs after she consumed beef that her husband had bought from Forkerhat Bazar in Kurigram. The government on 5 Sep 2010 issued a red alert across the country alarmed by the spread of anthrax but withdrew it on Thursday claiming that the situation was under control. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**HEMORRHAGIC FEVER WITH RENAL SYNDROME (RUSSIA):** 08 October 2010, Annually the incidence of hemorrhagic fever with renal syndrome (HFRS) in the Republic of Udmurtia is up to 10 times higher than the average figure for the whole of Russia, according to Rospotrebnadzor (Federal Service for Consumer Protection and Human Welfare). Annually about 2,000 people contract HFRS in the Republic. Human fatalities can also result from this infection. The main vector of the infection is the bank vole (*Myodes glareolus*), which migrates into human habitats with the onset of colder weather. Rospotrebnadzor recommends rodent extermination and enhanced hygiene as the only protective measures against this infection. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**NOROVIRUS, OYSTER RECALL (CANADA):** 07 October 2010, The BC [British Columbia] Centre for Disease Control has confirmed that an outbreak of illness related to eating uncooked Pacific Coast oysters is being caused by norovirus. The Canadian Food Inspection Agency [CFIA] is warning about eating raw oysters harvested from Effingham Inlet on Vancouver island. The affected oysters have been traced to a section of Effingham Inlet on the west coast of Vancouver Island. The oysters were harvested between 7 Sep 2010 and 21 Sep 2010. A health hazard alert by the Canadian Food Inspection Agency has been expanded to include oysters from Evening Cove Oysters Processing of Nanaimo, BC. Other processors already listed in the alert include Albion Fisheries of Victoria, Albion Fisheries of Vancouver, Pacific Rim Shellfish of Vancouver, and Sea World Fisheries of Vancouver. The Centre for Disease Control reports that at least 3 clusters of illness in the Vancouver area are related to eating uncooked oysters from Effingham Inlet. Contaminated oysters were traced to a section of Effingham Inlet, on Vancouver Island. The number of people who have come down with gastrointestinal ailments is not being disclosed. Health officials say symptoms that include nausea, vomiting, diarrhea, and stomach cramps usually occurred within 48 hours of consuming raw oysters, and lasted a couple of days. Oysters feed by filtering large amounts of water through their gills. When the water is contaminated with norovirus, the virus can build up in the flesh of the oyster. Norovirus -- which can spread from person to person as well as through tainted food or in water contaminated by feces -- is a common cause of gastroenteritis, but is rarely fatal. The virus is killed by cooking. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**SALMONELLOSIS, SEROTYPE BAREILLY (UNITED KINGDOM):** 06 October 2010, Microbiologists at the Health Protection Agency's Centre for Infections (CFI) in Colindale have confirmed the link between contaminated bean sprouts and 141 cases of Salmonella [enteric serotype] Bareilly in the UK. Specialists in the CFI's Salmonella Reference Unit report that the strain isolated from a bean sprout sample is indistinguishable from the strain of S. Bareilly isolated from human samples. Bean sprouts had already featured strongly in a case control study in which people who had suffered from S. Bareilly infection and controls (people who did not become ill) were questioned about what they had eaten prior to the onset of illness. However, both the HPA and the Food Standards Agency (FSA) stress that bean sprouts are safe to eat provided that they are washed and cooked until piping hot before consumption or are clearly labeled as ready-to-eat. Professor Qutub Syed, a director with the HPA's Local and Regional Services Division, is chairing an outbreak control team comprising representatives from the Agency, the FSA, Health Protection Scotland, and Environmental Health Officers from a number of local authorities. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**YELLOW FEVER (SENEGAL):** 06 October 2010, On 20 Sep 2010, the Ministry of Health in Senegal reported a suspected case of yellow fever in Mbour health district in Thies region, which is approximately 31 miles from Dakar, where the suspected case was hospitalized. The case was identified as a 27 year-old fisherman working in the Gambia (Tanji locality) who presented with clinical symptoms of fever and jaundice. Blood specimens from the patient were laboratory tested at the Institut Pasteur de Dakar and found to be IgM positive by ELISA and confirmed with PRNT [plaque reduction neutralization test], a more specific test. The patient had no history of yellow fever vaccination. A 2nd suspected case reported in Thies region, Senegal was also a fisherman from Tanji locality in the Gambia, showing neurologic symptoms including an altered mental state. This particular case was found not to be confirmed by the Institut Pasteur de Dakar. Through WHO, the Gambia has been informed of the situation in order to assess the epidemiological situation in Tanji locality. Senegal conducted a yellow fever preventive mass vaccination campaign in 2007, targeting more than 3.1 million people in all 18 districts not previously protected through outbreak response. In the health district of Thies, 314,713 people were targeted and vaccination coverage of 91.8 percent (88.3-95.3 percent) was achieved. This preventive campaign was part of the global Yellow Fever Initiative which aims to prevent yellow fever epidemics and secure adequate yellow fever vaccine supply for Africa. Routine infant immunization coverage against yellow fever in Senegal was 79 percent in 2009. After the Gambia yellow fever outbreak in 1978-1979, a village-based serological retrospective study estimated some 8000 cases and 1,700 deaths had occurred. According to some reports, the national vaccination coverage was estimated to be 95 percent in January 1979. The national routine infant immunization coverage reported for 2009 was 99 percent. In the face of high routine and recent preventive vaccination coverage in both Senegal and the Gambia, an epidemic is not anticipated and emergency vaccination is not required at this time. Investigation around sporadic cases may identify pockets of unimmunized individuals and

guide immunization and vector control strategies at the local level for those at risk. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**SALMONELLOSIS, REPTILE FEED (CANADA):** 05 October 2010, owners of snakes and lizards should take precautions when feeding them frozen rodents, which may be contaminated with salmonella, the Public Health Agency of Canada says. The agency says 7 cases of human illness have been reported in Canada between April 2010 and August 2010 caused by a strain of Salmonella linked to frozen rodents. The agency did not identify any particular producer. Food for cats and dogs can also carry salmonella.
The agency recommends:
- Always washing hands thoroughly with soap and water after feeding, handling, or cleaning up after pet reptiles and their food products.
- Cleaning surfaces that come into contact with reptiles or their food.
- Sealing frozen reptile food products in a plastic bag and placing in a covered garbage can.
The Public Health Agency said it is investigating with provincial and territorial counterparts whether this outbreak is associated with a similar illness in the USA and if a product implicated in a USA outbreak was distributed in Canada. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN):** 03 October 2010, The mysterious death of a resident medical officer (RMO) at the Ayub Teaching Hospital (ATH), has been attributed to Crimean- Crimean hemorrhagic fever (CCHF), hospital management said on Friday. Medical Superintendent of the hospital Dr Iftikhar told The News that the laboratory reports from the National Institute of Health (NIH) had confirmed the death of the doctor was due to CCHF virus infection. CCHF is a viral disease that occurs primarily in animals but humans are also susceptible to it. The disease is indigenous to many African, European and Asian countries. Being a tick-borne disease, the majority of the people who contract the virus are involved in the livestock industry. The deceased doctor caught fever and died after spending a night in Bisham, Shangla district, where he had gone to perform duties at the health facility established for people affected by floods. He was treated at the ATH but could not survive. The younger brother of the deceased doctor has been showing the same symptoms for the past few days with intermittent [increased] temperature and low platelet [counts]. Sources said the ATH administration had no infectious diseases specialist and had decided to refer the patient to the Pakistan Institute of Medical Sciences in Islamabad. After the confirmation of death of the doctor due to CCHF virus infection, the hospital administration sent blood samples of his relatives and hospital staff to the laboratories in Islamabad. It also decided to provide free medical treatment to all the relatives of the deceased doctor. A special ward has been set up at the Dental Block where all patients suspected of having the disease will be kept in isolation. Another ICU unit will also be established in the hospital to provide medical treatment for dengue, bird flu and CCHF patients. It is worth mentioning here that there is no virologist or infectious disease specialist in Khyber Pakhtunkhwa [province]. The Executive District Officer (Health) in Mansehra, Dr Javed Tanoli, told reporters that 4 more patients suspected to be suffering from CCHF had been hospitalised. Dr Tanoli said the district health department was taking protective measures in Mansehra. He said the samples of the 4 suspected CCHF patients admitted to the King Abdullah Teaching Hospital, Mansehra, were also sent to NIH for tests and confirmation of the infection. Dr Tanoli said after the death of the hospital doctor, the district health department was adopting precautionary steps in accordance with the World Health Organization guidelines. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**OTHER RESOURCES AND ARTICLES OF INTEREST:**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.


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